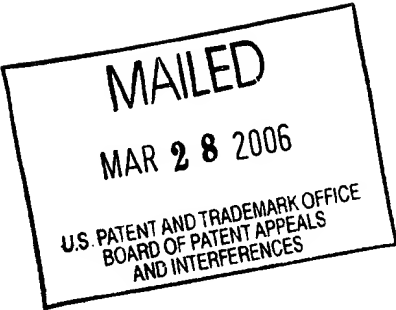


The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.



UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANK W. ADAMS, LEANDRE ADIFON, PEDRO BARANDA,
MARC CHEVILLIARD, JEAN-NOEL CLOUX, MASASHI KAWARASAKI,
YUTAKA MATSUMOTO, JEAN-PIERRE MENARD,
JEAN-PIERRE PUGNY and BRUCE ST. PIERRE

Appeal No. 2006-0422
Application No. 09/163,259

ON BRIEF

Before FRANKFORT, MCQUADE and BAHR, Administrative Patent Judges.
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Frank W. Adams et al. appeal from the final rejection (mailed February 9, 2001) of claims 1-6, 8 and 19. Claims 7 and 9-18, the only other claims pending in the application, stand withdrawn from consideration.

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THE INVENTION

The subject matter on appeal relates to "an elevator system including a drive motor provided between an elevator car and a hoistway sidewall" (specification, page 1). Representative claims 1 and 2 read as follows:

1. An elevator system comprising:
a hoistway defined by a surrounding structure;
an elevator car and counterweight located in the hoistway;
and
a drive motor located between the elevator car and a sidewall of the hoistway, the drive motor drivingly coupling and suspending the elevator car and counterweight via at least one flat rope.

2. An elevator system as defined in claim 1, further including

first and second support columns located on opposite sides of a hoistway relative to each other, each of the support columns extending vertically from a bottom portion to a top portion of the hoistway between the elevator car and said sidewall of the hoistway; and

a support member mounted on and extending generally horizontally between the first and second support columns at a top portion of the hoistway, and wherein the drive motor is supported on the support member.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Pearson	1,035,230	Aug. 13, 1912
Olsen	4,664,230	May 12, 1987
Aulanko et al. (Aulanko)	0 710 618	May 08, 1996
European Patent Application		

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THE REJECTIONS

Claims 1 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Aulanko in view of Pearson.

Claims 2-6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Aulanko in view of Pearson and Olsen.

Attention is directed to the main and reply briefs (filed October 4, 2001 and April 3, 2002) and answer (mailed December 18, 2001) for the respective positions of the appellants and examiner regarding the merits of these rejections.

DISCUSSION

I. Grouping of claims

In addressing each rejection, the appellants have not separately argued the patentability of any individual claim apart from the other(s). Thus, for purposes of the appeal, claim 19 shall stand or fall with claim 1 and claims 3-6 and 8 shall stand or fall with claim 2 (see In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978)).

II. The 35 U.S.C. § 103(a) rejection of claims 1 and 19 as being unpatentable over Aulanko in view of Pearson

Aulanko discloses a traction sheave elevator designed to efficiently and economically utilize building space, essentially by eliminating the separate machine room typically associated with elevators (see columns 1 and 2). As shown diagrammatically in Figure 1, the elevator comprises an elevator car 1, diverting pulleys 4 mounted to the underside of the elevator car, a counterweight 2, a diverting pulley 9 mounted to the topside of the counterweight, elevator car and counterweight guide rails 10, 11, and 11a vertically disposed in an elevator shaft or hoistway for guiding the up and down movements of the car and counterweight, a support beam 20 mounted on the upper ends of guide rails 11 and 11a, a relatively flat drive machine unit 6 having a traction sheave 7 and associated power and control equipment 8 mounted on the support beam, and hoisting ropes 3 which run down from an anchorage 13 at the top of the shaft, around the diverting pulley 9 on the counterweight, up and around the traction sheave 7 of the drive machine unit 6, down and around the diverting pulleys 4 on the elevator car 1 and up to an anchorage 14 at the top of the shaft.

It is not disputed that Aulanko teaches, or would have suggested, an elevator system responsive to all of the limitations in claim 1 except for the one requiring the drive motor to drivingly couple and suspend the elevator car and counterweight via at least one "flat rope." Although the Aulanko system includes a drive motor 6 which drivingly couples and suspends elevator car 1 and counterweight 2 via hoisting ropes 3, Aulanko does not specify the exact nature of the hoisting ropes. To cure this shortcoming, the examiner turns to Pearson.

Pearson discloses a traction elevator system comprising an elevator car 10, a counterweight 11, a motor 15 having a driving sheave 13, and flat metallic strips 12 running from the elevator car, over the driving sheave, and to the counterweight. As described by Pearson,

It may be seen that the combined weight of the car and the counterweight is sustained by the strips 12 and the driving sheave 13. When the latter is rotated in one direction or the other the car will move up or down as the case may be. Flat metallic strips of suitable thinness to be flexible present a broad friction surface to a cylindrically faced driving sheave, and a great tractive effect is obtained by the use of such constructions, especially when the driving surface of the sheave is provided with a facing of some such material as leather [page 1, lines 83-95].

In combining Aulanko and Pearson to reject claim 1, the examiner submits that it would have been obvious "to modify the

apparatus of Aulanko et al by using [the] flat rope of Pearson in order to produce a large friction surface" (answer, page 3).

The appellants do not dispute that the Aulanko elevator system, as so modified in view of Pearson, would respond to all of the limitations in claim 1. The appellants do contend, however, that the rejection is unsound because "[t]here is no motivation to combine these two references" (main brief, page 4), "the use of flat ropes as disclosed in Pearson with the apparatus of Aulanko et al. would destroy the [space saving] function and purpose of the invention of Aulanko et al." (main brief, page 4), and "[f]inally, flat, steel straps, such as those suggested in Pearson, are not used in elevator systems for several reasons" (main brief, page 4).

The appellants' position here is not persuasive.

Pearson's disclosure that flat metallic strips, which the appellants concede to embody at least one "flat rope" as broadly recited in claim 1, can be used as elevator hoisting ropes and that such flat metallic strips provide "a great tractive effect" belies any notion that the combined teachings of Aulanko and Pearson would not have suggested the combination advanced by the examiner. The requisite motivation lies in Pearson's description of the desirable tractive characteristic of "flat ropes" used in

an elevator environment. This description would have provided the artisan with ample suggestion to employ flat ropes to implement Aulanko's generic teaching of hoisting ropes.

The related contention that the use of a flat rope in the Aulanko system would destroy Aulanko's space saving objective rests on (1) unsupported conjecture as to how much Aulanko's relatively flat drive machine unit 6, and more particularly its traction sheave(s) 7, would have to be enlarged to accommodate flat ropes, and (2) an unreasonably narrow view of the manner in which Aulanko achieves the desired building space efficiency. The record contains no evidence that the use of flat ropes would significantly enlarge the size, or change the relatively flat configuration, of Aulanko's drive machine unit so as to require an elevator shaft which is larger to any appreciable degree. Moreover, Aulanko makes it quite clear that the desired economy of building space is achieved primarily by the elimination of a separate machine room. Any slight increase in the size of Aulanko's drive machine unit due to the use of flat ropes would not negate this objective.

Finally, the argument that flat steel straps would not be used in elevator systems hinges on the premise that such flat ropes would be viewed by the artisan as "impractical, unsafe and

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inoperable" (main brief, page 7) as compared to round wire ropes. Here again, however, the appellants have failed to present a sound evidentiary basis for such speculation. This line of argument is further flawed in that it (1) makes unfounded and unduly limited assumptions as to the nature of the flat ropes which would have been suggested by Pearson, (2) flies in the face of Pearson's disclosure which demonstrates that flat ropes are a known and desirable expedient in elevator systems, and (3) fails to take into account the rather expansive breadth with which the appellants have recited the flat rope in the claims.

Thus, considered in light of the evidence and argument before us, the combined teachings of Aulanko and Pearson justify the examiner's conclusion that the differences between the subject matter recited in claim 1 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. Accordingly, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claim 1, and claim 19 which stands or falls therewith, as being unpatentable over Aulanko in view of Pearson.

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III. The 35 U.S.C. § 103(a) rejection of claims 2-6 and 8 as
being unpatentable over Aulanko in view of Pearson and Olsen

Notwithstanding the examiner's determination to the contrary (see page 4 in the answer), Aulanko does disclose first and second columns in the form of guide rails 11 and 11a and a support member in the form of support beam 20 which satisfy the limitations in claim 2. In this regard, guide rails 11 and 11a are, to the extent broadly recited in claim 2, "located on opposite sides of a hoistway relative to each other." Hence, the examiner's citation of Olsen, which also discloses elevator support or guide rails 28 on opposite sides of a hoistway relative to one another, is superfluous.

Accordingly, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claim 2, and claims 3-6 and 8 which stand or fall therewith, as being unpatentable over Aulanko in view of Pearson and Olsen.

SUMMARY

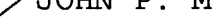
The decision of the examiner to reject claims 1-6, 8 and 19 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

Charles E. Frankfort
CHARLES E. FRANKFORT
Administrative Patent Judge


JOHN P. MCQUADE
Administrative Patent Judge

BOARD OF PATENT
APPEALS
AND
INTERFERENCES


JENNIFER D. BAHR
Administrative Patent Judge

JPM/gjh

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RANDY G. HENLEY
OTIS ELEVATOR COMPANY
PATENT DEPARTMENT
TEN FARM SPRINGS
FARMINGTON, CT 06032